

Judging from the effect of the extremely cold wave of the last week of January and the first week of February, 1895, when the Bluebirds were almost exterminated, it would be fair to suppose that the even colder weather of the first and second weeks of February just past, would have finished them. As indicated elsewhere in this issue, however, it will be seen that Bluebirds were very much in evidence in Lorain County, Ohio, on March 11. They have been fairly common in many places in the county during the greater part of March. It would seem that the survivors of 1895, being the fittest to survive, produced a race of hardier birds which found the recent extreme cold scarcely an inconvenience. Let us hope that they will survive unnumbered winters.

The signs of returning prosperity are more and more manifest in our chosen field of science as well as in the industrial world. The many different organizations for the study of birds, state and otherwise, are publishing their own records. Thus the Maine Ornithological Society contributes to the science thru its quarterly "Journal" of ten pages. The Cooper Ornithological Club likewise finds its sixteen-page illustrated bi-monthly "Bulletin" a far greater satisfaction than a few pages in some other publication. The publication of the Michigan and Iowa organizations continue to improve. "Bird Lore," under the editorship of Mr. Frank M. Chapman and management of the Macmillan Company, enters the field as the champion of bird protection, and has the promise of a wide circulation and a useful mission. The growing numbers of these publications exclusively devoted to Ornithology indicate a growing conception of the need of earnest, careful, discriminating study of the whole field. It is well so.

In *Forest and Stream* for February 25, 1899, we notice an article by our fellow member, Mr. Benj. T. Gault, in which the Crow figures as a nest robber of the Prairie Hen, and of many other birds. It seems hard to believe, sometimes, that the black side of the Crow character is not more prominent than the other side.

PUBLICATIONS RECEIVED.

New Mallophaga, III. Comprising Mallophaga from birds of Panama, Baja California and Alaska, by Vernon L. Kellogg.

Mallophaga from birds of California, by Vernon L. Kellogg and Bertha L. Chapman.

The Anatomy of the Mallophaga, by Robert E. Snodgrass.

This publication is one of the "Occasional Papers of the California Academy of Sciences," this one being No. VI.

In the first part Professor Kellogg has described twenty new species of Mallophaga and in the second part the two authors have jointly described twenty-eight new species. Besides these forty-eight new species, seventy-three previously known ones were found upon the specimens examined. A complete list of the hosts adds value to these admirable studies. The numerous figures of species are well executed and clear. This work, together with the Anatomy of the Mallophaga, by Robert E. Snodgrass, which forms the third part of this paper, is much needed both from an Entomological and Ornithological standpoint. We shall await further studies of the Mallophaga with interest.

L. J.

A Precise Criterion of Species,* by (Dr.) C. B. Davenport and J. W. Blankinship, Harvard University.

In this carefully considered discussion of a most vexing problem, Dr. Davenport has mapped out a method of procedure in the determination of species and varieties which might be profitably adopted by our A. O. U. Committee on Classification and Nomenclature. If a precise criterion of species is among the possibilities, which Dr. Davenport clearly demonstrates to be, then it is of the first importance, in the interest of a stable nomenclature, that its adoption should not be postponed. We commend this paper to the careful consideration of those interested in classification.

L. J.

Bulletins 54 and 55, New Hampshire College, Agriculture Experiment Station. *Bulletin 54*. The Winter Food of the Chickadee, by Clarence M. Weed.

This paper of sixteen pages and eleven figures in the text, is one of a series intended to determine the economic importance of our common birds, and is in line with the work carried on by our national Agricultural Department. Would that every state experiment station might realize the importance of this sort of work and make ample provision for its prosecution. The author's "Conclusion" will illustrate the standing of our Chickadee. "The investigations recorded in this *Bulletin*, show that the Chickadee is one of the best of the farmer's friends, working

*Reprint from *Science*, N. S., Vol. VIII, No. 177. Pages 685-695. May 20, 1898.

thruout the winter to subdue the insect enemies of the farm, orchard, and garden. For the efficient service thus rendered the bird asks no pay, although it may be induced to remain more of the time upon the farm premises if bones or suet are hung in trees, where the birds may get it during the winter."

Bulletin 55. The Feeding Habits of the Chipping Sparrow, by Clarence M. Weed.

In this paper of twelve pages we have the complete record of one day's allowance of three young Chipping Sparrows, "so nearly full grown that they hopped out of the nest the second day after these records were made." The observations were made upon a nest, placed conveniently near a window, by the author and Mr. W. F. Fiske, beginning at 3:40 A. M. and closing 7:30 P. M. of June 22. During this day the young were fed 189 times, and so far as it was possible to ascertain, upon injurious insects and worms. It is thus made clear that even this seed-eating bird, so familiar to the door-yard, is one of man's indispensable allies in the ceaseless war against insect pests. L. J.

A Preliminary List of the Birds of Belknap and Merrimac Counties, New Hampshire, with notes by Ned Dearborn. Presented to the Faculty of the New Hampshire College of Agriculture and the Mechanic Arts as a thesis for the degree of Master of Science, June, 1898.

It is cause for congratulation that our institutions of higher education are not only accepting but encouraging original field work as worthy of higher degrees. It evinces a wholesome reaction from a once studied neglect of this important phase of life. Both the structure and the activities of animals have their legitimate place, and neither should throw disrespect upon the other. We welcome this list of birds as another illustration of the real importance which the study of the local fauna is coming to have, as well as a contribution to the literature of a region which has been thus far little heard from.

The list comprises 191 species and sub-species, arranged in accordance with the A. O. U. list of 1895, with the changes up to 1898 incorporated. While the scientific names are in strict accord with the A. O. U. list, it is not universally true of the vernacular names. It is the writer's opinion that correctly written vernacular names are hardly less important than the scientific names.

While an index of such a list would hardly seem necessary, a brief summary would add not a little to it.

The list is the result of ten years of field study by the author, supple-

mented by other authentic records. Many of the species are liberally commented upon, matters of interest concerning all the species known to the author and the average dates of migration for the ten years are given. The extreme as well as the average dates of migration would add interest and value to the record.

The typographical appearance is unusually pleasing and adds materially to the well prepared list. L. J.

American Monthly Microscopical Journal. Vol. XX, Nos. 2 and 3.

Birds and All Nature. Vol. V, Nos. 2 and 3.

Bird Lore. Vol. I, No. 1.

Book Reviews. Vol. VII, Nos. 2 and 3.

Bulletin of the Cooper Ornithological Club. Vol. I, No. 2.

Bulletins 159 and 160, Cornell University Agricultural Experiment Station.

Bulletin of the Michigan Ornithological Club. Vol. II, Nos. 3 and 4.

Bulletins 96, 97, 98, Ohio Agricultural Experiment Station.

Bulletins 44 and 45, Pennsylvania State College Agricultural Experiment Station.

Journal of Applied Microscopy. Vol. II, No. 1.

Journal of Elisha Mitchell Scientific Society. Vol. I, No. 1.

Journal of the Maine Ornithological Society. Vol. I, Nos. 1 and 2.

Museum. Vol. V, Nos. 4 and 5.

Osprey. Vol. III, Nos. 5, 6, 7.

Report of the State Botanist. 1897. With plates. New York State Museum.

Sportman's Magazine. Vol. III, No. 2.

Teacher's Leaflets. Nos. 1 to 13 inclusive. The College of Agriculture, Cornell University.

Transactions of The Academy of Science of St. Louis. Vol. VIII.